## ABSTRACT

A waveguide gas laser includes an enclosure filled with a lasing gas. A ceramic block is provided with one or more waveguide channels. At least one of the waveguide channels includes an open region which is in fluid communication with a waveguide channel. Lasing gas in the enclosure fills the waveguide channels and the lateral extension. An electric field is applied across the lateral extension of the waveguide channel while simultaneously applying a smaller electric field across the waveguide channel. The electric field across the lateral extension ignites a discharge in the lateral extension that spreads into the lasing gas in the waveguide channel. The electric field across the waveguide channel is sufficient to sustain the discharge in the lasing in the waveguide channel.